0550 0307 OIPE #7

CRF Errors Corrected by the STIC Systems Branch

Serial Number: 09/972,741 ENTERED

CRF Processing Date: 3/18/2002
Edited by: _____
Verified by: _____ (STIC staff)

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically: _____
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____
- ☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included: _____
- ☐ Deleted extra, invalid, headings used by an applicant, specifically: _____
- ☑ Deleted: ☑ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____.
- ☐ Inserted mandatory headings, specifically: _____
- ☐ Corrected an obvious error in the response, specifically: _____
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically: _____
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____
- ☐ Other: _____

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

OIPE

RAW SEQUENCE LISTING DATE: 03/18/2002
PATENT APPLICATION: US/09/972,741 TIME: 08:24:29

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF3\03182002\I972741.raw

```
     4 <110> APPLICANT: Allen, Keith D.
     6 <120> TITLE OF INVENTION: TRANSGENIC MICE CONTAINING
     7       MAGNESIUM-DEPENDENT PROTEIN PHOSPHATASE GENE DISRUPTIONS
    10 <130> FILE REFERENCE: R-723-CIP
    12 <140> CURRENT APPLICATION NUMBER: US 09/972,741
C--> 13 <141> CURRENT FILING DATE: 2001-10-08
    15 <150> PRIOR APPLICATION NUMBER: US 09/815,935
    16 <151> PRIOR FILING DATE: 2001-03-22
    18 <150> PRIOR APPLICATION NUMBER: US 60/191,235
    19 <151> PRIOR FILING DATE: 2000-03-22
    21 <150> PRIOR APPLICATION NUMBER: US 60/216,249
    22 <151> PRIOR FILING DATE: 2000-07-06
    24 <160> NUMBER OF SEQ ID NOS: 4
    26 <170> SOFTWARE: FastSEQ for Windows Version 4.0
    28 <210> SEQ ID NO: 1
    29 <211> LENGTH: 1387
    30 <212> TYPE: DNA
    31 <213> ORGANISM: Mus musculus
    33 <400> SEQUENCE: 1
    34 cccgggcccg gccgccgtcg cgggaccccg tgcccggccg ccgtcgccac cgccgccccg 60
    35 gccgaccgag ggacccgccc gcccgcggct gctccggacc tagaggatca agtcataatg 120
    36 ggagcatttt tagacaagcc aaagatggag aagcataatg cccaggggca ggggaatggg 180
    37 ttacgatacg gcctaagcag catgcaaggt tggcgagttg aaatggagga cgcacacacg 240
    38 gctgtgatcg gtttgccaag tggacttgag acatggtcat tctttgctgt atatgatggg 300
    39 catgctggtt ctcaggttgc caaatactgc tgtgagcact tgttagatca catcaccaat 360
    40 aaccaggatt tcagaggatc tgcaggagca ccttctgtgg agaacgtaaa gaatggaatc 420
    41 agaacagggt ttctggagat tgatgaacac atgagagtta tgtcagagaa gaaacatggt 480
    42 gcagatagaa gcgggtcaac agctgtgggc gtcttaatct ctccccaaca tacttatttc 540
    43 attaactgtg gagactcgag aggtttactt tgtaggaata gaaaagttca cttcttcaca 600
    44 caagaccata aaccaagtaa cccgctggaa aaagaacgaa ttcagaatgc agggggctcg 660
    45 gtgatgattc agcgtgtcaa tggctctctg gctgtatcga gggcccttgg ggatttcgat 720
    46 tacaaatgtg tccatggaaa aggtcccaca gagcagcttg tctccccaga gcccgaagtc 780
    47 catgatattg aaaggtctga agaagatgac cagttcatca tccttgcatg cgatggcatc 840
    48 tgggacgtca tggggaacga agagctctgt gactttgtga gatccagact tgaagtcact 900
    49 gatgaccttg agaaagtttg caatgaagta gtcgacacct gcttgtataa gggaagtcga 960
    50 gacaacatga gtgtgatttt gatctgtttt ccaagtgcac ccaaagtctc ggcagaggcg 1020
    51 gtgaagaagg aggcggagct ggacaagtac ctggagagca gagtagaaga aatcataaag 1080
    52 aagcaggtgg aaggcgtccc tgacttagtc cacgtgatgc gcacgttagc cagtgagaac 1140
    53 atccccagcc tcccaccagg gggtgaattg gcaagcaagc ggaatgtaat tgaagccgtt 1200
    54 tacaatagac tgaaccctta caaaaatgac gacactgatt ctgcgtcaac cgatgatatg 1260
    55 tggtaaagcc gctcacccag ccgtggactc accttcgcct gcaaagggga agccagctca 1320
    56 tccttgccga gcctttacca tccatcaccg acttcacagg agggtctgac acgggtgagg 1380
    57 actgcag                                                        1387
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Input Set : A:\PTO.AMC.txt
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<210> SEQ ID NO: 2
<211> LENGTH: 382
<212> TYPE: PRT
<213> ORGANISM: Mus musculus
<400> SEQUENCE: 2

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Met Gly Ala Phe Leu Asp Lys Pro Lys Met Glu Lys His Asn Ala Gln
 1               5                  10                  15
Gly Gln Gly Asn Gly Leu Arg Tyr Gly Leu Ser Ser Met Gln Gly Trp
            20                  25                  30
Arg Val Glu Met Glu Asp Ala His Thr Ala Val Ile Gly Leu Pro Ser
        35                  40                  45
Gly Leu Glu Thr Trp Ser Phe Phe Ala Val Tyr Asp Gly His Ala Gly
    50                  55                  60
Ser Gln Val Ala Lys Tyr Cys Cys Glu His Leu Leu Asp His Ile Thr
65                  70                  75                  80
Asn Asn Gln Asp Phe Arg Gly Ser Ala Gly Ala Pro Ser Val Glu Asn
                85                  90                  95
Val Lys Asn Gly Ile Arg Thr Gly Phe Leu Glu Ile Asp Glu His Met
            100                 105                 110
Arg Val Met Ser Glu Lys Lys His Gly Ala Asp Arg Ser Gly Ser Thr
        115                 120                 125
Ala Val Gly Val Leu Ile Ser Pro Gln His Thr Tyr Phe Ile Asn Cys
    130                 135                 140
Gly Asp Ser Arg Gly Leu Leu Cys Arg Asn Arg Lys Val His Phe Phe
145                 150                 155                 160
Thr Gln Asp His Lys Pro Ser Asn Pro Leu Glu Lys Glu Arg Ile Gln
                165                 170                 175
Asn Ala Gly Gly Ser Val Met Ile Gln Arg Val Asn Gly Ser Leu Ala
            180                 185                 190
Val Ser Arg Ala Leu Gly Asp Phe Asp Tyr Lys Cys Val His Gly Lys
        195                 200                 205
Gly Pro Thr Glu Gln Leu Val Ser Pro Glu Pro Glu Val His Asp Ile
    210                 215                 220
Glu Arg Ser Glu Glu Asp Asp Gln Phe Ile Ile Leu Ala Cys Asp Gly
225                 230                 235                 240
Ile Trp Asp Val Met Gly Asn Glu Glu Leu Cys Asp Phe Val Arg Ser
                245                 250                 255
Arg Leu Glu Val Thr Asp Asp Leu Glu Lys Val Cys Asn Glu Val Val
            260                 265                 270
Asp Thr Cys Leu Tyr Lys Gly Ser Arg Asp Asn Met Ser Val Ile Leu
        275                 280                 285
Ile Cys Phe Pro Ser Ala Pro Lys Val Ser Ala Glu Ala Val Lys Lys
    290                 295                 300
Glu Ala Glu Leu Asp Lys Tyr Leu Glu Ser Arg Val Glu Glu Ile Ile
305                 310                 315                 320
Lys Lys Gln Val Glu Gly Val Pro Asp Leu Val His Val Met Arg Thr
                325                 330                 335
Leu Ala Ser Glu Asn Ile Pro Ser Leu Pro Pro Gly Gly Glu Leu Ala
            340                 345                 350
```

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Ser Lys Arg Asn Val Ile Glu Ala Val Tyr Asn Arg Leu Asn Pro Tyr
355 360 365
Lys Asn Asp Asp Thr Asp Ser Ala Ser Thr Asp Asp Met Trp
370 375 380

<210> SEQ ID NO: 3
<211> LENGTH: 200
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Targeting vector
<400> SEQUENCE: 3
gcaacacaat gcttgtaggt atagcctgtg agtttttcca gcttccttgt atcttataga 60
ttctgggtaa agagtgttgg acatgttttg tttcaaaggc aatcacttat tttcttattt 120
ctcttccttt acagacctag aggatcaagt cataatggga gcatttttag acaagccaaa 180
gatggagaag cataatgccc 200

<210> SEQ ID NO: 4
<211> LENGTH: 200
<212> TYPE: DNA
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Targeting vector
<400> SEQUENCE: 4
ctgctgtgag cacttgttag atcacatcac caataaccag gatttcagag gatctgcagg 60
agcaccttct gtggagaacg taaagaatgg aatcagaaca gggtttctgg agattgatga 120
acacatgaga gttatgtcag agaagaaaca tggtgcagat agaagcgggt caacagctgt 180
gggcgtctta atctctcccc 200

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/972,741

DATE: 03/18/2002
TIME: 08:24:30

Input Set : A:\PTO.AMC.txt
Output Set: N:\CRF3\03182002\I972741.raw

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date